

ABSTRACT OF THE DISCLOSURE

A camera unit is arranged opposite a grinding surface. While moving the focal position of the camera unit in a direction perpendicular to the grinding surface relative to the grinding surface of the grinding tool, a control unit causes the camera unit to pickup images of the grinding surface at a plurality of focal positions. Then, an already prepared basic image pattern of abrasive gains is compared with the image data obtained at the plurality of focal positions by the image pickup operation. As a result of the comparison, image data approximate to the basic of the focal position at which the detected image data was obtained.